UNION CARBIDE

NUCLEAR DIVISION NEWS

A Newspaper for Employees of the Nuclear Division, Union Carbide Corporation

Vol. 5 — No. 7 April 4, 1974

QUESTION BOX ??

If you have questions on company policies, benefits, etc. or any other problems with which we might help, just let us know. Drop your inquiry to the Editor, Nuclear Division News. *(Or telephone it in to your plant news representative.) You may or may not sign your name. It will not be used in the paper.*

Questions are referred to the proper authorities for accurate answers. Each query is given serious consideration for publication.

Answers may be given to employees personally if they so desire.

QUESTION: A great number of people would like to be able to ride their bicycles safely to work as part of their contribution to alleviating the energy crisis. Dr. Lincoln stated in your December 21 issue that: "Cycling is a healthy and efficient form of transportation if it can be made safe. Bikeways appear to be the best answer." Further, it appears that the city of Oak Ridge is going to begin work on a bikeways system. However, in a recent "Question Box" answer you stated that the Nuclear Division has no plans for bikeways between the Y-12 Plant and the city of Oak Ridge. Why not?

ANSWER: A bike trail in the vicinity of the Y-12 Plant, even if the cost could be justified, would serve no purpose unless it connected with a trail from the city of Oak Ridge. The building of bikeways on any large-scale basis will be expensive. Whether or not the taxpayers are willing to finance bikeways is a matter to be determined by appropriate governmental bodies. As you indicate, the city of Oak Ridge is considering the possibility of building bike trails. However, at this time no action has been taken, no funds have been allocated, nor have proposals to seek outside financial assistance been formulated. In the event the city does decide to build the trails, we will cooperate with them in any way we can. At the present time, however, the answer we gave earlier stands. That is, we have no plans concerning construction of bikeways in the vicinity of our plants.

QUESTION: The Nuclear Division has an excellent policy concerning safety shoes: the company encourages employees to use these shoes by helping to pay their costs. The eyeglass program is, in some respects, even better since the company pays the full cost for a pair of safety glasses. However, the Nuclear Division does not provide safety sunglasses for employees unless such glasses are needed on the job. Would it be possible for the company to subsidize the cost of safety glasses (in a manner similar to that for safety shoes) for those who want them for home use? This would save money for employees, encourage safety both on and off the job, and generate goodwill for the Nuclear Division.

ANSWER: Over the years, it has been our practice to sell safety shoes to any employee at less than cost, even though the shoes are not an absolute requirement on the job. These shoes are worn away from work as well as at work. Where safety glasses are provided by the Company, employees also wear them on and off the job.

Employees are provided colored safety glasses where there is exposure to extreme light intensities in performance of their jobs. For example, welders and electrical linemen are often exposed to extreme light intensities and colored safety glasses are issued for their protection. Generally, normal exposure to sunlight requires no special protection for the eyes. The Company issues colored safety glasses only if their use is required on the job.

Several years ago we had become more liberal in some parts of our operations in the issuing of colored safety glasses. An objection was registered by the East Tennessee Optometric Association on the basis that we were directly interfering

(Continued to page 8)

Ball and Martin head ORNL's atom 'smasher'

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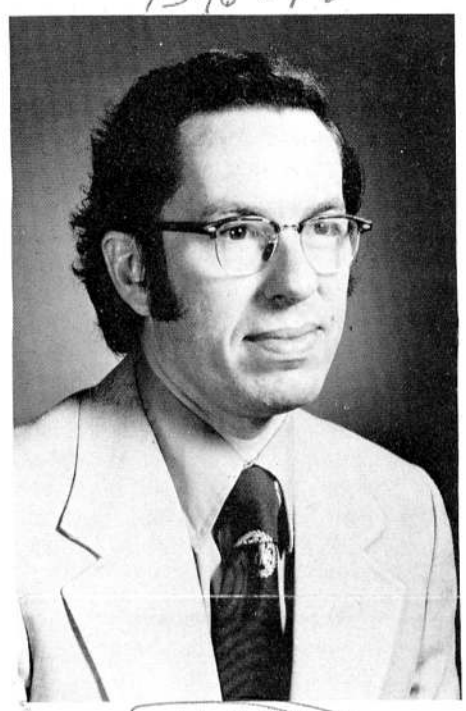

John B. Ball

John A. Martin

The appointments of James B. Ball and John A. Martin as director and deputy director, respectively, of the Heavy Ion Accelerator Project, a multimillion dollar "atom smasher" planned at Oak Ridge National Laboratory, have been announced by Herman Postma, Director of ORNL. Both men are members of the Physics Division.

The new accelerator represents a major addition to the research facilities of ORNL and will place at the Laboratory a unique facility that will answer a national need for greatly increased capabilities in the rapidly expanding field of heavy-ion research.

The key facility of the Heavy Ion Project will be a 25 million volt vertical electrostatic accelerator to be housed in a 200-foot tower. It will be located adjacent to the existing Oak Ridge Isochronous Cyclotron so that the two machines may be used either separately or in combination with each other.

The new accelerator will be nearly twice as powerful as any existing machine of its type and will be used to accelerate a large variety of ions to very high velocities (an ion is an atom which has had some of its electrons removed). These high energy projectiles will permit scientists to study the processes that occur when large chunks of nuclear matter collide. The studies will lead to a better understanding of the properties of nuclear matter and of important nuclear processes, such as fission.

Another use of the facility will be the attempt to create the so-called super heavy elements, much heavier than those ever produced by natural processes. Studies will serve as a testing ground for judging the validity of theories underlying present understanding of the chemical and physical properties of matter.

For fields of investigation in atomic physics, the machine will be able to create exotic atomic species that exist in the atmospheres of stars (including our own sun) but have previously not been available for controlled study in the laboratory.

In addition to basic research, the ions produced by this facility should find important application in the fields of materials research and radiation damage.

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Uniform blue badges coming . . . .

Plans are now underway to change badges for all Nuclear Division personnel at the end of this calendar year.

Atomic Energy Commission regulations require that new badges be issued every five years. The actual change over will take place between Christmas and December 31.

The change will see a uniform badge used at all four Nuclear Division facilities. All employees with "Q" clearances will have a blue badge. New badge pictures will be taken.

In addition, each employee's Social Security number will appear on his or her badge, substituting for the employee badge number which has been used previously. One of the benefits of using the Social Security number is simplifying the record changes required when an employee transfers from one plant to another.

Biomedical studies school growth cited by director

By Robert L. Wesley

"Because Oak Ridge National Laboratory's Biology Division is a government-funded operation, the problems studied here are highly relevant to national needs. A student, simply by being here, is caught up in this theme."

Daniel Billen, new director of The University of Tennessee - Oak Ridge Graduate School of Biomedical Studies, thus described what he believes to be the real significance of the School which is located within the ORNL Biology Division complex. Its classrooms, study facilities, laboratories and administrative offices are housed in building 9207 and its full-time faculty members are UT personnel. Since its initial year of operation with about six students in 1966, it has grown to a present enrollment of 41 doctoral and 25 postdoctoral students.

In addition to Billen, who holds the position of professor, the core faculty includes Donald Olins, associate professor, and assistant professors Franklin H. Gaertner, Franklin D. Hamilton and Charles T. Hadden. The School also can call on some 80 other persons, mostly ORNL Biology Division staff members, as shared faculty.

A research biologist as well as educational administrator and lecturer, Billen came to the School from the University of Florida at Gainesville, where he headed the radiation biology laboratory. He is a native of Poughkeepsie, N.Y. and holds a B.S. degree from Cornell and M.S. and Ph.D. degrees from UT. Because he was on the ORNL Biology staff from 1951 to 1957, the return to Oak Ridge is much like a homecoming.

Biomedical research

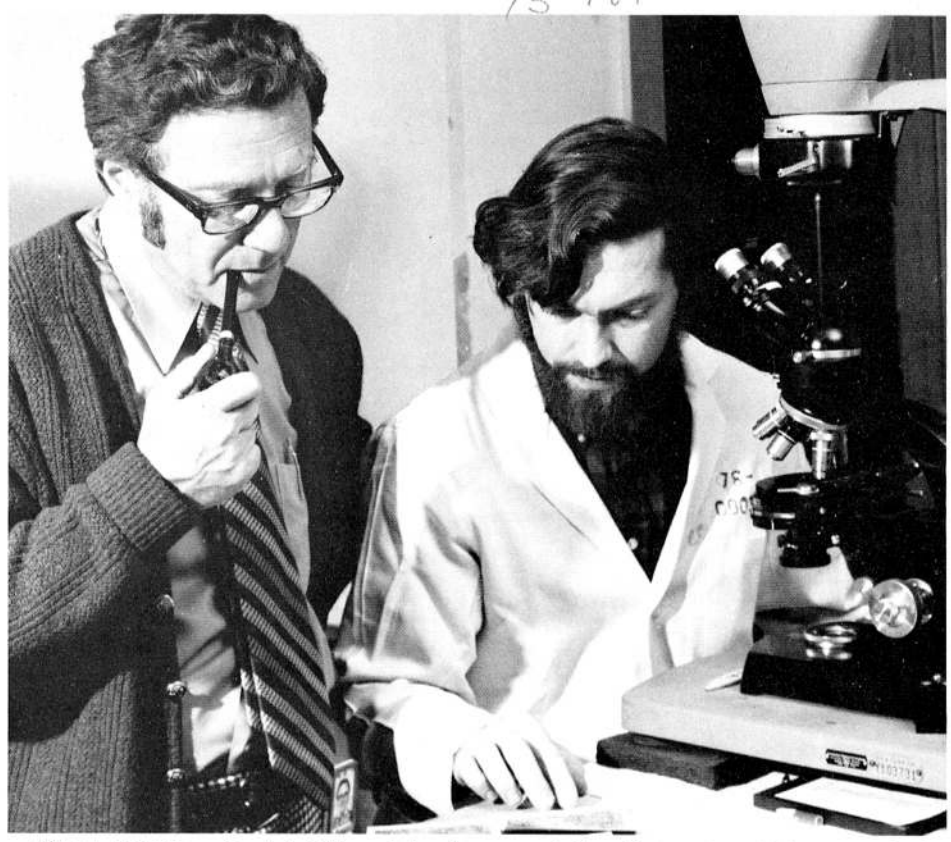
"I'm really very optimistic about the future of the School," he said. "It offers a unique opportunity to research-minded students because they are exposed to a broad spectrum of biological research and have the opportunity to meet or perhaps to work with persons of international reputation. The students also learn the feeling of being involved in large, federally-supported research programs aimed at meeting national priorities. And I hope they are learning the importance of flexibility in adjusting to technological changes.

"The school is not intended for persons who want to become practicing physicians, nor for persons who want to undertake biomedical engineering projects such as constructing artificial hearts. There are other areas of the UT program that can accommodate students with those interests. This School is aimed at developing the growth of those students who want to make a career of biomedical research.

"One of the uncertain features about such research is that what seems vitally important this year may not be as important five years from now. Persons entering this field should realize that they need to remain flexible enough to be able to move from one biology career area to another as the need arises. In order to do this, a student has to have a proper grounding in the fundamentals. We believe we can provide them with the kind of curriculum and training that will enable them to adapt more readily. The environment here is very competitive and aggressive, and, in my opinion, very beneficial to their growth."

B.S. degree required

Billen pointed out that both UT and ORNL benefit from the School. The University benefits because it can take advantage of the existing laboratories and equipment and the talent of participating ORNL staff members. ORNL benefits in having the students in residence in the laboratories and in having at hand a number of bright, highly qualified young people who can be considered for employment.



DUAL ROLE — Daniel Billen, left, director of The University of Tennessee-Oak Ridge Graduate School of Biomedical Sciences, is a radiation biologist as well as an educational administrator. He conducts research here with fellow faculty member Charles T. Hadden.

To enter the doctoral program, a student should have at least a B.S. degree in some area of biology and a strong background in chemistry. Through interviews, and sometimes written or oral exams, faculty members determine the basic courses a new student might require to be able to undertake the program. A first year student soon becomes engaged in several hours of class work per day in addition to preparation of three research projects which may extend into the second year. When the required curriculum courses are out of the way, students have more freedom in selecting the areas of study in which they are most interested.

Typical student

Most of the students are financially supported by grants from the National Institute of General Medical Science, from AEC or National Science Foundation fellowships, or from assistantship salaries at UT. The average age of the students is in the mid-twenties; although a few are in their thirties. About half the students are married, and there are two husband-wife teams.

There are 29 men and 12 women in the doctoral program and 22 men and three women in the postdoctoral group. Included in these totals are four black students in the doctoral group and seven black students in the postdoctoral group.

A typical doctoral student is Christie Holland, an attractive, 23-year-old from Newport News, Va., and a graduate of the University of Richmond. Now in her second year in the program, she is interested in developmental biology. One of her projects involves the study of DNA synthesis in sand crabs, while the creatures are undergoing limb regeneration. This experimental work at ORNL is directed by staff biologist Dorothy Skinner.

Cramped for space

Describing a typical day, Miss Holland said she arrives at the School at 8:30 a.m. and departs at 5:30 p.m. She returns again at 7:30 p.m. and leaves at 11:30 p.m. "Each day includes several hours of classes, laboratory work and study. Periodically, we are required to present seminars on special subjects of research."

Billen said that the School has grown to the extent that the students are becoming a bit cramped for classroom and study space. "Even so," he continued, "we would like to have about 40 more doctoral students. Each of our shared faculty members would like to have at least one or two students in residence."

He also expressed the hope that the School might someday have its own building for classrooms and offices within the Biology Division complex. A proposed building, costing approximately one-million dollars, would be constructed with state funds.

New master's program

In addition to the doctoral and postdoctoral students, the School administers a summer program for black junior and senior year students from southeastern colleges and universities. The Black Students Summer Program, established

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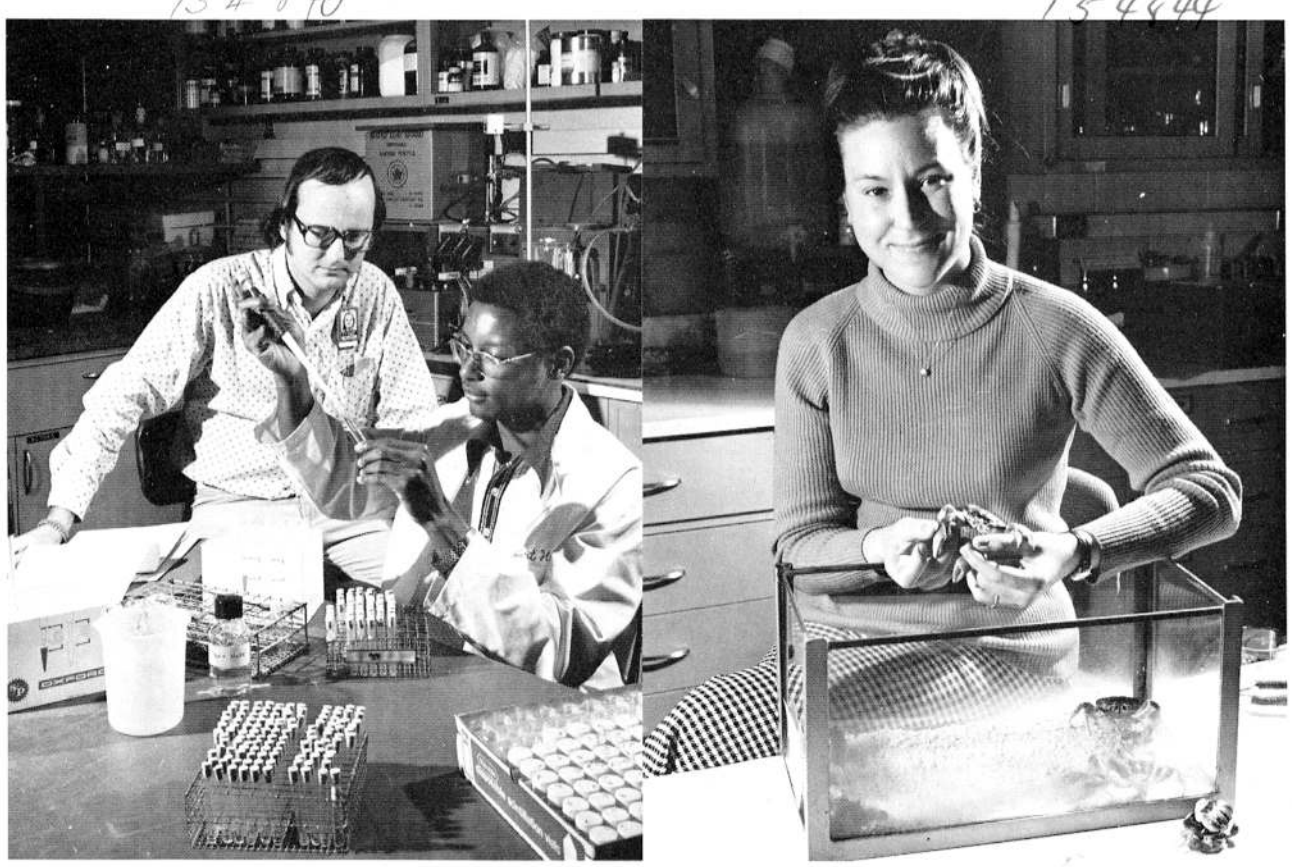

STUDENTS AT WORK — Don Miller, left, New Braunfels, Tex., and Bob Holt, Sarasota, Fla., in the photo at left, work in one of the ORNL Biology Division labs. Both are students in the UT-Oak Ridge Graduate School of Biomedical Sciences. Christie Holland, a second-year doctoral student from Newport News, Va., conducts research involving how sand crabs regenerate limbs.

'As we wrap around this new challenge...' Hart

Robert J. Hart, Manager of Oak Ridge Operations, U. S. Atomic Energy Commission, offered an optimistic outlook for the facilities Union Carbide operates for the AEC in a recent talk before the Oak Ridge Rotary Club.

Hart also referred to the "outstanding productive performance" of Nuclear Division employees and emphasized that "Union Carbide Nuclear Division has our full confidence."

Highlights of his talk follow:

Today, I want to comment on the overall AEC picture, the Oak Ridge picture, the very promising state of the ORNL programs, the Oak Ridge construction boom and several aspects of community relations . . .

Budget comparison

Budget legislation submitted to Congress for the AEC in the coming fiscal year would authorize appropriations amounting to $3.6 billion, an increase of more than 10 percent over the FY 1974 level.

In Oak Ridge, we are expecting a FY 1974 operating budget of $361 million, compared to $299 million for this year; and plant and capital equipment is budgeted at $107 million for FY 1975, compared to $85 million in FY 1974. Of the P&CE total, in FY 1975, we foresee $92 million in new obligations for construction projects.

Energy research

The supplemental funding flowing to the Laboratory is being channeled, as one might expect, to areas of research related to energy technology development. Approximately $8 million of new FY 1974 money is being used to pump prime nuclear reactor safety research, controlled thermonuclear research, high-temperature gas-cooled reactor research and the molten salt reactor concept development. Concerning the reactor safety research, work at ORNL is centering on reactor core residual heat dissipation and stress analysis studies on heavy section steel used in the fabrication of reactor pressure vessels.

Fusion research

Fusion research is supporting efforts to improve plasma temperature and containment in the present ORMAK research device; and planning is now under way on design concepts for the next generation ORMAK device, in which scientific feasibility of fusion is hoped to be proven. If it can be achieved, it may well be characterized as equivalent to what the Fermi Stagg Field reactor experiment of 1942 was to fission research.

Work on the gas-cooled reactor concept is accelerating both at the base research and development concept and on thorium utilization within this system. Use of thorium, widespread in the earth's crust, in HTGR's provides a potential source of fuel through transmutation of thorium to U-233 — an obvious advantage in this era of fuel shortages.

Research, development

Finally, new funds were provided for resumption of research on the molten salt reactor concept. Research in general is geared at developing MSR technology to a point where AEC can decide if it is a viable alternative to other reactor concepts.

The new budget increases forecast for 1975 would provide for a vigorous continuation of reactor research and development. To give you some understanding of the importance of reactor work at ORNL now and in the future, I submit the following budget progression totals. When we started fiscal year 1974, reactor research at ORNL was funded at an annual level of some $18 million. Today, with late FY 1974 supplemental funding, the total stands at $22 million, and if the President's budget is passed as submitted, the total will climb to $32 million. Plot that increase on a chart for smiles - it is roughly 50 percent.

Fast breeder reactor

I have purposely left until last mention, for added emphasis, the work by ORNL on the Liquid Metal Fast Breeder Reactor. Echoing the sentiments of the administration and the agency, Laboratory management has endorsed as its "number one priority," work on the LMFBR.

All of us, I am sure, look with anticipation and pride at the LMFBR demonstration plant project. One can project into the future at a time when we will have hydro, fossil, fission, breeder and fusion power within or adjacent to the Oak Ridge city limits. We will then certainly occupy a unique niche on the face of the globe.

Research in other areas, such as the life sciences, physical sciences, and the important area of radioactive waste management is also flourishing at ORNL. In general, nonreactor related research areas are experiencing average funding increases on the order of 10-15 percent.

Construction listed

Construction projects in the new AEC budget are many and Oak Ridge fared extremely well:

1. A $10 million project to construct a high temperature gas-cooled reactor fuel refabrication pilot plant.

2. A $16.8 million heavy-ion accelerator laboratory which would provide, through construction of a new particle accelerator, heavy ions which have the capability of inducing radiation effects in metals in a very short time. This would allow prediction of long-term damage, thus of indirect benefit to energy research.

3. An $8.8 million environmental science laboratory to house the programs of the Environmental Sciences Division.

4. A $2.1 million project to upgrade laboratory facilities on the second and third floor levels of the Biological Research Building.

5. Lastly, a $9.5 million project to provide improvements to intermediate level radioactive waste handling processes. A new evaporator is included for greatly reducing in volume the quantity of waste to be handled.

A vigorous recruitment and hiring program is under way at ORNL, and staff is already beginning to grow. Based on the current and newly submitted budget, we would expect employment at ORNL to grow by about 600 persons between now and the end of the calendar year.

Employment looks 'up'

Since I spoke to you last, the Y-12 Plant has experienced the predicted depressed funding and employment situation. But Y-12, like ORNL, has "turned the corner."

During the latter months of FY 1974, Y-12 employment is projected to increase slightly. Based on current weapons workload planning guidance and projections of reimbursable work for others, the level of effort required at Y-12 in FY 1975 for all programs is expected to be essentially the same as in FY 1974.

Financial assistance

The AEC posture in the community has not changed appreciably in the past year. Of the $175 million AEC-funded payroll in Oak Ridge Operations, some $74 million went to the city of Oak Ridge, $19.5 million went to Anderson County residents outside of Oak Ridge, and $18.3 million went to Roane County residents outside of Oak Ridge. This has the effect of providing a very favorable ratio of average income to taxes paid for both the city and the counties. This is a point often lost sight of in talking about the local tax situation.

Still disturbing is the percentage of employees working in Oak Ridge and living in Oak Ridge. At the end of last year, this figure had dropped to 37 percent, albeit they earn 42 percent of the salaries.

Financial assistance payments to Oak Ridge were $2 million in the past year, of which AEC is paying $1.3 million. Roane County received $125,000 in use taxes as well as about $70,000 in tax loss payments. We don't yet have the Anderson County request for tax loss payments for CY 1973, but for the previous year, it was also almost $70,000. On top of this, the State of Tennessee was paid almost $2 million in use taxes.

AEC's tax load

With regard to the AEC and its relation to the city of Oak Ridge and Roane and Anderson Counties, much has been said over the past year with particular reference to the AEC paying its share of the tax load. This subject has been about equally divided between contemplation of taxing the uranium enriching complex and prospects of relief for the counties under the "benefits vs. burdens" concept. Recent news coverage indicated that AEC is recommending to the administration that, for the next fiscal year, each of the two counties be paid an additional amount, i.e., $295,000 to Roane County and $250,000 to Anderson County. I have no preconceived notion of how the OMB will react to modifying the FY 1975 AEC Authorization Bill nor how the Congress will react to authorization and appropriation. Also, since these proposed payments are not a reflection of "burdens over benefits" in the counties - one can hardly assume that, even if appropriated, this will provide any long-range answer to communities' desires.

Another subject, still in limbo in community relations, is that of availability of land to the city for industrial development. The missing ingredients here are both a reasonable request from the city and an interest on the part of anyone in obtaining an industrial location in Oak Ridge. However, in our recent response to the city on this subject, we have offered to meet and consider the subject further at the convenience of the city. We are not unaware nor unresponsive to the need for land if industrial development is to be fostered in Oak Ridge. We are, however, somewhat cold to a "shotgun-type" of request for 10,000 acres of the best land in the area - without either environmental impact, consideration of government program requirements, the wherewithal to acquire it, or potential customers to use it.

AEC-ORO

Robert J. Hart, Manager
AEC - Oak Ridge Operations

I do believe that the federal government is more than carrying its share in the support of Oak Ridge and the surrounding area.

Leadership - mechanism

Last year I made two points - one, that we needed to provide a climate of continuing responsiveness to AEC and the other agency program directors. We have done that in working with Union Carbide toward the mutual accomplishment of our present strong integrated management team.

Two, that the Oak Ridge community provide the leadership and mechanism for a regional industrial development effort. At least partly in response to this, the Roane-Anderson Economic Council was formed. Granted their endeavors to date have centered more on obtaining additional federal assistance than in promoting the area and attracting new industry to the area. The vehicle to do so is there. It needs only to be guided in the direction of exploring all avenues that may lead to the enhancement of the economy.

'A tremendous job'

Let me acknowledge that as we move forward to "wrap around this new challenge," the Union Carbide Nuclear Division has our full confidence. This confidence evolves from their outstanding productive performance over the past year. As is often the case, this on-going, taken-for-granted performance is overshadowed in that only the critical seems to get to the public. This performance has involved a fantastic record in safety, in labor relations, in personnel recruiting and placement work to accommodate the layoffs and hirings, the application of the most sophisticated of quality control standards, a successful critical equipment procurement program, and other accomplishments in support of solid program performance, design and construction.

And last but not least, we feel that we (contractors, community and government) have jointly done a tremendous job of presenting to visiting dignitaries, industrial participants, the news media, program directors and others, that face of competence and success that people have grown to expect from Oak Ridge.

COMPANY Service 20 25 30

Y-12 PLANT
30 YEARS

Bill Hudson, utilities administration; Allen M. Schrader, process maintenance; Harvey T. Kite, Superintendents Division; Rosel H. Davis, laboratory operations; Russell A. Allstun, general machine shop; Cecil S. Hurtt, production analysis; Willie L. Anderson, material transfer and packing.

25 YEARS

Glenn M. Warren, Charlie F. Hall and Richard W. Brothers.

20 YEARS

Arthur O. Roberts Jr., James L. Scott, Charles W. Styles, Raymond E. McJunkins, Eric E. Johnson, Fletcher E. Morgan, Hiram Crutchfield, Marvin F. Hazelwood, Glen L. Lambert, Chester R. Kennedy, Burrel E. Henry, Paul R. Blackwell, Paul H. Giles, William L. Gaston, John F. Hughes, Donald T. Chambers, Ben Rankin, Billy J. Hill, John K. Stewart, David L. Freels, Eugene H. Giles, Raymond F. Phillips, Marion S. Powell, Cledith A. Boone, Clifton K. King, Charles A. Hooper, Gilbert D. Ray, James R. Lawley, Clyde L. Wright, Hubert E. Stout, Elmer D. Folden, Charles C. Tenpenny, William T. Hayley, William E. Sizemore, Tom T. Patterson and Hugh L. Boshears.

ORGDP
30 YEARS

Stanley B. Harris, chemical analysis; Fred B. Brasel, chemical operations administration; Edgar H. Kelley, engineering; Thomas E. Haynes, Oak Ridge area electricity distribution; Edward R. Lewis, fire department; Frank A. Wheeler, guard department; and Felton E. McSpadden, guard department.

20 YEARS

Edward C. Denny.

PADUCAH
20 YEARS

William L. Parrent, Ben W. Doom, Joseph D. Hicks and Claude S. Summers.

GENERAL STAFF
25 YEARS

Mary C. Vest.

ORNL
30 YEARS

Thirteen ORNL employees will reach the 30-years-of-company-service mark during the month of April. They are:

Frank K. Large, Plant and Equipment; Richard G. Reinhardt, Thermonuclear; Hoyce Bailey, Isotopes; Keith B. Brown, Chemical Technology; Harris W. Dunn, Analytical Chemistry; Ray L. Hill, Thermonuclear; Clifford E. Clayton, Plant and Equipment; Edward G. Struxness, Environmental Sciences; Charles B. Gaither, Operations; James C. Elrod, Operations; William L. Derieux Jr., General Engineering; Ward E. Foster, Finance and Materials; and William H. Johnson, Plant and Equipment.

25 YEARS

Bernice H. Fitzgerald, Donald R. Ward and George W. Prater.

20 YEARS

Norma E. Brashier, Philip T. Perdue, Joseph E. Ratledge, Grady O. Sides, Charles Stone, Ernest L. Long Jr., James M. Huffman, Gene A. Palmer and Lester J. King.

F&M division names Plemons, Terry to supervisory posts

Plemons Terry

Two promotions in the Finance and Materials Division at ORNL were recently announced by W. Ron Ragland, Director. Harry G. Plemons was appointed supervisor of the travel and cashier section, and William E. Terry was named supervisor of the traffic section.

Plemons is a native of Lenoir City. He attended Tennessee Wesleyan College and Bowling Green Business University in Kentucky. Prior to joining the ORNL staff in 1951, Plemons served in the U. S. Navy and worked for a short period at TVA.

His wife, the former Betty Davis of Lenoir City, is employed in the Nuclear Division's Law Department at Y-12. The Plemons reside at 412 A Street, Lenoir City.

Bill Terry has worked at ORNL for 18 years. He previously served as traffic manager with Rust Engineering Company. His duties as supervisor of the traffic section will include coordinating teletype services.

Terry is a native of Oneida, Tenn. He and Gladys, his wife, live on Melton Hill Lake, at Route 17, Guinn Road. They have a daughter, Lillian, and a granddaughter. Terry enjoys spectator sports and boating in his spare time.

Both Plemons and Terry will report to Ward E. Foster, head of the financial services department.

ORGDP

CAR POOL members from West Haven, Cumberland Estates, Knoxville, to Portal 4, straight day. W. C. Lisenbee, plant phone 3-3275, home phone Knoxville 524-5110.

RIDE or car pool members from Jackson Square area, Oak Ridge, to Portal 2, straight day. Charles Agee, plant phone 3-9648, home phone Oak Ridge 483-8164.

ORNL

RIDE or car pool members wanted from East Bearden section, Knoxville, to ORNL, straight day. T. G. Harman, plant phone 3-1627, home phone Knoxville 584-9647.

Son of ORGDP man earns top engineering honors

John Douglas Birdwell, son of ORGDP's Louis T. Birdwell, is among eight University of Tennessee-Knoxville students who graduated first, academically, in their respective colleges on March 19. Young Birdwell was the top graduate from the College of Engineering, and had an overall grade point average of 3.98.

Birdwell

Doug graduated from Oak Ridge High School in 1972, after completing a year as an early admissions student at UT. His major was electrical engineering - computer design specialty. He expects to earn a M.S. degree in electrical engineering - control systems specialty by the end of the summer quarter at UT, and then plans to pursue his doctorate at the Massachusetts Institute of Technology next fall.

Doug is a member of Tau Beta Pi and Eta Kappa Nu honorary fraternities. His hobbies include bike riding, hiking, target shooting, bridge, chess and photography. He is a member of the Carbide Camera Club.

Doug's father works in electrical engineering at ORGDP. His mother, Mrs. Mary Birdwell, teaches at Karns Elementary School. Their home is on Shady Oak Lane in Karns.

HOME WEDDING — Mary K. Aldridge and Gerald Goldberg were married February 16 at the home of the bridegroom in Oak Ridge. The Rev. David Young officiated at the rites. The bride is the daughter of Mr. and Mrs. James H. McCulley (he is a retired pipefitter from Y-12). The bridegroom is in ORNL's Analytical Chemistry Division.

What's Possible Now

The American Cancer Society reports that we could save more lives from cancer with the knowledge we have now if everyone learned cancer's Warning Signals and had a periodic health checkup including cancer tests. How about you?

More employees 'pool it' as result of Division's program

Many people are wondering how the car pool situation looks three months after the Nuclear Division initiated its computerized car pool program for employees.

Employees at the Oak Ridge facilities received their printouts listing others in their residential area several weeks ago.

Load factor increase

According to David Pilati, the load factor at ORNL has increased from 1.6 to 1.8 passengers per car. A recent car count indicated that the number of cars being driven to ORNL had decreased by about 200 since last December.

Most of this change (at least half) occurred since the printouts were distributed to individuals who had indicated an interest in participating in car pools.

Although there has not been a car count at ORGDP or Y-12 recently, it is believed that the increase in participation at ORNL is a good indication of what has happened throughout the Nuclear Division.

Paducah's program

The car pool situation at the Paducah Gaseous Diffusion Plant was unique from the start - they already had a load factor of 2.8 passengers per car when the program was initiated.

Keith Bryant, coordinator of the car pool program at Paducah, says their program is somewhat different from the one used in Oak Ridge. Employees were given a form and a set of 10 grid maps covering the two major cities and eight counties where most employees live. Since most of the employees already belong to car pools, there was little need to provide individual printouts. New employees, or those wishing to change or increase their car pool, may obtain information by telephoning Bryant's office.

"Spin-off"

According to Bryant, an employee-community relations "spin-off" occurred as a result of the car pool effort. The maps used in the program, which were obtained from the highway departments of the different counties, are very much in demand. Requests have been received not only from employees wanting copies for home and office use, but also from local fire departments and other businesses. This is understandable since the maps not only show streets, but individual houses on the streets.

The Employment or Personnel Department at each facility in Oak Ridge has a master copy of the computer printout which is available to new hires or employees who have transferred from one facility to another. It is planned that the master copy will be updated periodically to include such changes.

If you are one of those people who has still not made an effort to form or join a car pool, think about it! The savings in gasoline and money are well worth the initial inconvenience you might experience.

Nine ORGDP employees assume new duties in recent promotions

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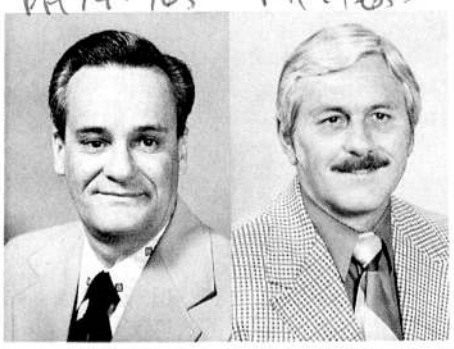


Bellamy Hudson

Roes Slaughter

PH74-766 PH74-633 PH 74-767 PH74-654

Lindsay Maples

Kegley Kirkpatrick

PH 74-768

Tate

Nine promotions are announced at the Oak Ridge Gaseous Diffusion Plant.

Gerald H. Bellamy has been named a supervisor in maintenance engineering. A native of New Market, he has been at ORGDP nearly 23 years, and worked in electrical contracting before joining Union Carbide. A graduate of the Coyne Electrical School, Bellamy has also attended The University of Tennessee.

Bellamy and his wife, Anna, live at 4104 Fulton Road, Knoxville. They have three children, Linda, Carol and Leah.

He manages a girls' softball team, enjoys photography, gun-collecting and hunting in his spare time.

Paul E. Hudson is a new maintenance foreman in mechanical services. He joined Union Carbide in 1952 and worked as a mechanic in ORGDP until 1964 when he transferred to ORNL, as a pipefitter. He transferred back to ORGDP last August. He is a native of Oliver Springs.

Mrs. Hudson is the former Betty Shipwash, and they live at Route 4, Harriman. They have three children, Kay, Don and Sid.

Hudson enjoys golfing, fishing and football.

Tracy M. Kegley Jr., a native of Birmingham, Ala., has been made an associate production engineer in barrier engineering.

He is a graduate of Birmingham Southern College and has attended the University of Alabama. He joined Union Carbide in 1950 at ORNL and transferred to ORGDP in 1973.

Mrs. Kegley is the former Lottie Coward, and the couple lives in the Claxton Community at Powell. They have two children, Joseph and William.

Astronomy and stamp-collecting occupy Kegley's spare time.

James D. Kirkpatrick has been promoted to a maintenance foreman in the Fabrication and Maintenance Division. He formerly worked in Y-12, joining Union Carbide in 1957, and transferring to ORGDP in 1973.

His wife is the former Phyllis Moyers. They live at 3708 Thrall Road, Knoxville, with their children, James, Sandra, Gary and Bill.

He is active in little league sports and is an avid golf fan.

David N. Lindsay, a native of Knoxville, has been with Union Carbide three years. He worked with DuPont and Commercial Broadlooms Corporation before coming to ORGDP. He has been named a construction engineer in Engineering.

Mrs. Lindsay is the former Ann Hamby. They live at Route 1, Oliver Springs, with their children, John and Lee Ann.

Church work occupies his spare time, and he is active in the Toastmasters Club.

Ronald B. Maples, a native of Phoenix, Ariz., has been at ORGDP two years. He has been promoted to a roads and grounds foreman in general maintenance.

He worked with Florida Pan American Airlines before joining Union Carbide, and the AVCO Lycomming Corporation.

Mrs. Maples is the former Doris Hayes. They live on Windswept Lane, Kingston. They have two children, Gregg and Debbie, who attend Kingston High School.

William L. Roes has been made a shift foreman in the Operations Division. He was born in Union, S.C., and joined Union Carbide 29 years ago, after serving in the U. S. Army.

He and his wife, the former Eva Mae Amos, live at 816 Lakeview Drive, Kingston. They have four children, Mary, William, James and Susan.

He lists golfing, gardening and fishing as avocations.

Elmer Slaughter Jr., a native of Knoxville, has been at ORGDP since 1951. He was recently named an associate design engineer in the electrical design department.

He was in the Air Force, and has attended Oklahoma A&M and The University of Tennessee.

Division Retirees

Five veteran Y-12ers retired at the end of March.

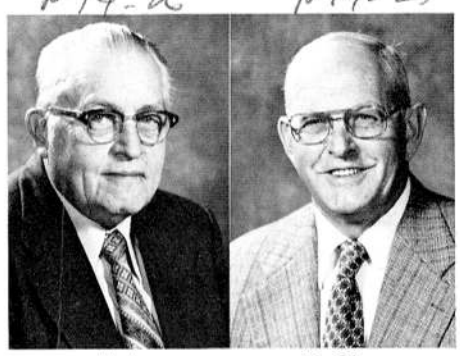
Clifford Holt, buildings, grounds and maintenance shops, lives at Route 27, Palmyra Drive, Knoxville. He came to Y-12 in 1943.

James S. McGhee, who also came to Y-12 in 1943, lives at 248 South Main Street, Clinton. He worked in area five maintenance.

Allen E. Morton, buildings, grounds and maintenance shops, came to Y-12 in 1951. He retires to his Route 1, Louisville, home.

Robert P. Putman, Route 5, Clinton, joined Union Carbide in 1953. He worked in process maintenance.

N74-26 N74-25

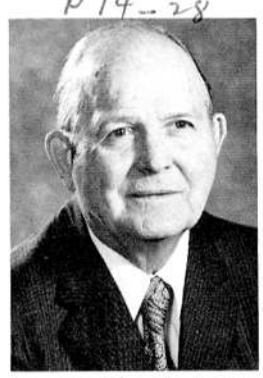


Holt McGhee

N74-24 N74-27

Morton Putman

N74-28



Sharp

Mrs. Slaughter is the former Dorothy Covington, and they live at Route 8, Sinking Springs Road, Knoxville.

Hiking, camping and photography occupy much of his spare time.

Clarence L. Tate has been made a supervisory trainee in the Fabrication and Maintenance Division. He is a native of Knoxville, and has been with Union Carbide six years. He worked at the Aluminum Company of America, before joining ORGDP.

Mrs. Tate is the former Doris Powell. They have three children, Vickie, Dorothea and Veronica, and live at 3239 Shields Avenue, Knoxville.

He enjoys hunting, fishing, basketball and auto mechanical work in his spare time.

August T. Sharp, general machine shop, joined the Y-12 force in 1944. He lives at Caryville.

N74-20

Crouse

Elmer G. Crouse, who probably had one of the best attendance records at Y-12, retired recently.

Crouse, born in Marion, Va., came to work in Y-12 in the early 40's, leaving in 1947, and returning in 1950. He lives at 11144 Thornton Lane, Concord. His wife, Evelyn, also works in Y-12, in the travel office.

Calendar of EVENTS

TECHNICAL

April 8

Biology Division Seminar: "Mapping Lysosomal Gene-Enzyme Systems in Drosophila," Ross J. MacIntyre, Division of Biological Sciences, Cornell University. Large Conference Room, Building 9207, 3 p.m.

April 9

Biology Division Seminar: "Optical Studies of Protein and Nucleic Acid Conformation," George M. Holzwarth, Department of Biophysics, University of Chicago. Tower I Conference Room, Building 9207, 12:15 p.m.

April 10

Chemical Technology Division Seminar: "Coal Liquefaction - Overview," J. M. Holmes. Central Auditorium, Building 4500N, 3 p.m.

April 17

Computer Sciences Division Seminar: "Nonlinear Least Squares," Gene H. Golub, Stanford University. East Auditorium, Building 4500N, 10 a.m.

COMMUNITY

April 7

Kiwanis Clubs present Travel and Adventure Series: "Serenade to Spain," Walter S. Dodson. Oak Ridge High School Auditorium, 3 p.m.

April 20-21

Melton Hill Council of Garden Clubs presents "Flower Power" at the Oak Ridge High School Auditorium, April 20 - 3:30 - 9 p.m. April 21 - 1 to 5 p.m. No admission.

APRIL 12 HOLIDAY

Friday, April 12, is an official holiday for Nuclear Division employees.

No employee will be required to be at work Good Friday, unless his presence is required by continuous operation or security of the plants.

RECREATIONOTES

SKEET LEAGUE

ORGDP's Bill Denton took February's skeet firings with a 49.149. Y-12ers Allen Van Hull and Bob Allstun took next firings with 48.923 and 48.358.

Y-12ers swept the March winning circle, as Jim Rhew fired a 48.528. Carl Brewster scored 48.400 and Perry Bullard tallied a 48.165.

ALL CARBIDE GOLF

Entries for the three Oak Ridge plants' golf tournament for April is included in this issue of the **News.** Greens fees at the courses are as follows: Wallace Hills, Dead Horse Lake and Southwest Point, $4.

Entries must be in to the Recreation Office by April 24. Drawings for tee-off times will be made immediately and foursome captains will be notified.

Golf leagues for Oak Ridgers are forming for play this summer at Dead Horse Lake, Southwest Point, South Hills and Melton Hill. Get your entry in now, as play begins shortly.

SOFTBALL

The Recreation Department is now accepting entries for softball leagues for summer play at the park. Entries should be mailed to Recreation, Building 9711-5, stop 1, Y-12, or extension 3-5833.

ORNL BOWLING

The Untouchables and the Oops team are tied for first place in the Carbide Family Mixed League. C. R. Lively and Ann Carpenter rolled series of 576 and 506 recently.

The Ten Pins are a scant one and one-half point leader in the A League, over the ORAU crowd.

The Pin Heads hold a rather comfortable lead in the C League, steps ahead of the Knuckleheads. Carlos Brooks and J. R. Muir rolled tie games of 224 recently.

The ORNL Ladies' League still lies in the hands of the Pick-Ups with the Mousechasers close behind. Georgia Guinn rolled a 226 game on a recent night of bowling.

VOLLEYBALL LEAGUE

The Pack won the Atomic League in volleyball action, losing only four games. The Over-the-hill Gang won the Nuclear League, losing a total of eight.

Final standings follow:

ATOMIC LEAGUE

Team	W	L
Pack	51	4
Hawks	50	5
Taxi Squad	39	15
The Gang	38	16
The Quarks	28	26
Old Men	19	35
Electric Bananas	15	39
Rad-Fizz	13	41
Jokers	12	42
Funky Wambats	10	44

NUCLEAR LEAGUE

Over-The-Hill Gang	46	8
Pogo's	41	13
Sloths	36	18
Newcomers	33	21
Anti-Quarks	31	23
Bawlers	25	29
Artie's Army	23	31
Bombers	21	33
The Neutrals	14	40

BASKETBALL LEAGUE

The GBU's won the Atomic Basketball League, with only one loss, and the Bottlenecks beat back the rest of the pack with three losses.

Final standings follow:

ATOMIC LEAGUE

Team	W	L
G.B.U.'s	18	1
Has Beens	17	2
Testers	13	5
Bombers	11	6
Grundy Express	10	7
Underdogs	6	11
73 'ers	5	12
Electrodes	5	13
Possum Soup	4	14

NUCLEAR LEAGUE

Bottlenecks	16	3
Wildcats	15	4
COE	14	4
Rolling Bones	13	5
Chi-Town Hustlers	10	8
H-Shift	7	11
The Gunners	6	12
Eco-Trolls	5	13
Just-For-Fun	4	14
Isomets	4	14

Tee-Off Time Application for April 27

(Check Appropriate Plant)

☐ ORGDP – DEAD HORSE LAKE
☐ ORNL – SOUTHWEST POINT
☐ Y-12 – WALLACE HILLS

Check

_____ LEADER _____ _____

_____ Phone Bldg.

_____

_____ _____
Time Preferred

COMPLETE AND RETURN TO YOUR RECREATION OFFICE

Entries must be received prior to drawing on April 24, 2 p.m.

ORGDP–Building K1001–C-Wing–MS 12
ORNL/Y-12–Building 9711-5

Tee-off times for all tournaments will be drawn on Wednesdays prior to each Saturday's tournament. Golfers are responsible for reserving their own carts by contacting the pro shop following drawing for tee-off times.

ALL CARBIDE BOWLING TOURNAMENT

Del Lay took top honors in the recent All Carbide Bowling tournament, scoring a 1751 All Events scratch score. Vernice Clower took top women's scoring with a 1646.

The Pick-Ups picked up top team honors for women with a handicap score of 2935, as the Pinups posted a 2907. High in scratch score were the Pick-Ups also, with 2365.

The top men's team was the Ridgers with a scratch total of 2610. Handicap honors went to the Woodchoppers, 3014; the Half Frames, 2988, and the Possibles, with 2985.

Y-12er Bill Sise took men's singles honors, rolling scratch scores of 627 and a handicap total of 696. George Bailey took second place with 671, followed by J. A. Sharp, with 661.

Jim Fletcher and Bill Ladd won laurels in men's doubles, rolling a 1225 scratch combination. Bullock-Johnson, 1310; Fletcher-Ladd, 1294, and Murphy-Marrow, 1290, were handicap doubles highs.

Vernice Clower's 577 was high in women's singles; while handicap highs went to Mary Hawkins, 664; and Dobra Lee, 656.

Women's doubles honors were gleaned by Morris-Mook with 1059 scratch; and by Ward-Jago, 1237; and Keesee-Smith with a 1220 handicap total.

Mixed doubles scratch honors went to Mook-Wilkinson, with 1086; and handicap totals went to Phipps-Anthony, 1223; and Mook-Wilkinson, 1218, and Kirchler-Kirchler with the same score.

ORGDP BOWLING

The Uptowners hold first place, by a comfortable margin, in the ORGDP Women's League. Mary Foley rolled a 207 game recently to highlight activity.

The Double X gang holds down the fort in the Tuesday League. The Atoms, with a 3071, hold top rolling thus far in league action.

In the Wednesday League, it's the Sandbaggers, a few ahead of the Protectors and Planners. Ernie Bogle rolled a triplicate recently, and John Sharp showed the gang how to roll a 247 game.

Y-12 BOWLING

The Alley Cats edge forward, two points away from the Hits & Misses in the waning days of the Mixed League.

The Rollmasters keep a slight lead in C League rollings, a little ahead of the Royal Flush. The Mini Strikes rolled a 3128 handicap series recently!

The Has Beens and Eightballs battle it out for the lead in the Classic League, with the Mets close behind.

PADUCAH GOLF

Golfers at the Paducah Plant who are interested in Paxton Park play every Tuesday should call Recreation, on PAX 335.

Paducah's son named merit scholar finalist

Greg

Greg Cloyd, son of Millard Cloyd, 708 North 25th Street, Paducah, has been named a finalist in the 1974 National Merit Scholarship competition.

Greg, whose father is in the Operations Division at the Paducah Plant, will compete for 3,100 scholarships, to be awarded this spring. He is an Eagle Scout, associate editor of the St. Mary's school paper and a member of the American Society of Outstanding High School students.

Greg reached the finals in competition with 15,000 scholars in the semi-final competition. Winners will be announced in early May.

Ruby O'Kain crowned state bowling champ

Ruby O'Kain

Ruby O'Kain, computer sciences, took high score recently in Tennessee's state bowling tournament for women, to become the Nuclear Division's first State Champion.

Ruby's scores were 554 in singles, 594 in doubles, and 631 in team events, for an overall All Event score of 1779.

CARBIDE CAMERA CLUB

The Carbide Camera Club meets next Tuesday, April 9, at 7:30 in Room D-213, Cheyenne Hall, Oak Ridge.

John Googin, senior staff consultant for the Nuclear Division, will talk on and demonstrate the use of miniature cameras.

April's competition is color and black and white prints of patterns, shapes, forms and still life.

The public is invited to the Camera Club's meetings. Additional information on activities may be obtained from John Blankenship, extension 3-3533.

There are two modes of establishing our reputation; to be praised by honest men, and to be abused by rogues.

Colton

Next Issue

The next issue will be dated April 18. The deadline is April 9.

The Medicine Chest

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning their health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," NUCLEAR DIVISION NEWS, Building 9704-2, Stop 20, or call the news editor in your plant, and give him your question on the telephone.)

By T. A. Lincoln, M.D.

QUESTION: "In your article last week you said that a micron was a millionth of an inch. Is that really so?"

ANSWER: No, certainly not. I apologize for my mistake. Chalk it up to deadline pressures. A micron is one-millionth part of a meter or one-thousandth part of a millimeter. Since an inch is 25.4 mm, a micron is 1/25,400 or .0000393 inch. (Note - my editors missed it also!)

QUESTION: "Is it medically possible for a woman to start going through 'the change of life' before she's 30 years old?"

ANSWER: Yes. If she has a disease which destroys the hormone function of her ovaries or if her pituitary gland does not function properly, she may experience a premature menopause. If her thyroid gland becomes grossly underactive, she may cease having menstrual periods or may become grossly irregular. Once the thyroid hormone inbalance is corrected, this disturbance usually promptly returns to normal. A young woman will experience an immediate menopause if her ovaries have to be removed for cancer or some other destructive disease.

QUESTION: "Can anything, short of surgery, be done for varicose veins?"

ANSWER: Yes. If the varicose veins are small, they can sometimes be injected with a sclerosing solution which seals the vein due to severe chemical irritation of the vein wall. Injection therapy is no longer recommended for large varicose veins because the veins often recanalize and the varicosity returns. Also, the deep veins, especially their valves, can be damaged if too much solution is injected into too large a vein. The usual treatment for severe varicose veins is a complete surgical high ligation and stripping. The saphenous vein is tied off near the groin and a stripper instrument is fed through the vein, beginning through an incision at the ankle. The stripper is threaded up the vein and tributaries are identified and tied off. As a consequence, multiple incisions have to be made down the inner aspect of the thigh and leg in order to get the whole vein stripped out. Sometimes feeder veins which have become varicose have to be stripped out or tied individually.

QUESTION: "I take Aldoril-25 almost continuously in controlling my blood pressure, and for flare-ups add Ismelin (10 mg). Are there any harmful side effects to taking these drugs?"

ANSWER: Side effects from Aldoril include initial weakness, headache and mild sedation, which usually pass in a week or two. Occasionally, nasal stuffiness, dryness of the mouth, and unpleasant gastrointestinal symptoms such as constipation or diarrhea occur. Since Aldoril is a combination of methyldopa and hydrochlorthiazide, you need to be observed for toxic effects from both drugs. These infrequently include anemia, depression of white blood count and disturbances in liver function for methyldopa, and gout and low potassium weakness and muscular fatigue for hydrochlorthiazide. Ismelin can cause dizziness and fainting. If the drugs are used carefully, there is no reason for you to be fearful of toxic effects. All patients with hypertension taking these and other potent medicines must be followed closely. One way to get patients to come back is to refuse to write a refillable prescription. They may complain but they should realize that it is for their own safety as well as better management of their disease.

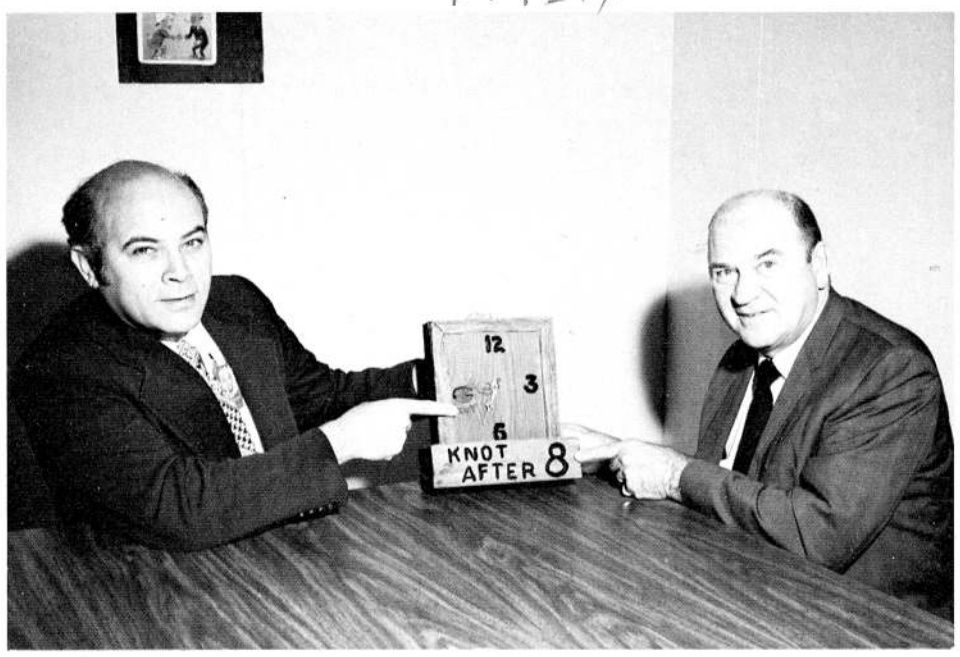
QUESTION: "How low does one's blood pressure have to go before it is considered bad instead of good?"

ANSWER: Low blood pressure used to be blamed for fatigue. Rather than explaining to patients that their symptoms were probably due to emotional causes, physicians used to blame it on low blood pressure and prescribe a "tonic." Now they often prescribe tranquilizers but rarely blame fatigue on low blood pressure. Physicians, for example occupational physicians, who perform many physical examinations on young people know that blood pressures of 90/60 are not rare and these kids are bubbling with energy. There are some pathological causes of low blood pressure, for example Addison's disease, which is due to chronic adrenal cortical insufficiency. In this case, extreme weakness, easy fatigability and fainting spells are common symptoms. It is an easy diagnosis to make when the disease is fully developed but can easily be missed early in its course.

Used equipment sale slated during April

A "spot-bid" sale of used government office equipment and vehicles is scheduled this month. The items may be inspected from 8:10 a.m. until 4:10 p.m. Monday through Friday, and Saturday, April 6, at the Oak Ridge Gaseous Diffusion Plant's K-722 building, off Route 58.

The sale begins at 9 a.m. April 17. Additional information may be obtained from extension 3-4601.



TIME CONTEST — The Materials and Services Division in Y-12 has declared war on absenteeism. Using a hand-made clock as the monthly prize, they pit each department in the division against each other. Don McMurray, office services supervisor, who designed the clock, left, demonstrates it to Edward A. Pluhar, division superintendent.

Y-12 Materials and Services Division combats absenteeism

With conservation measures constantly before us in the news, one of the most valuable assets man has is often ignored - time.

The Materials and Services Division in Y-12 has declared warfare on the loss of time through absenteeism, tardiness and the like.

With an idea developed by Don McMurray, offices services supervisor, and division superintendent, Edward A. Pluhar, the six-department division has set up an interdepartmental competition on a month-by-month basis to see who has the best overall attendance record.

Early reports show that the effort is paying dividends. January 1974 figures, compared to January a year ago, show a decline of 40 percent in lost time. February's decline shows an even more drastic reduction, where a savings of 62 percent was realized.

The timekeeping department grabbed honors in both months' competition, barely winning the honor in February.

The hand-made clock, actually designed and fabricated by McMurray from an old board from a barn, serves as the trophy to be passed back and forth among departments in the competition. McMurray used a knot in the wood to serve as the 9 a.m. mark . . . and uses the theme "Knot after 8" in his absentee control effort.

"There are, of course, legitimate reasons for one to be off from work," Pluhar explained. "But what we are combating in this effort is the erosion of good attendance brought on by an attitude of 'well, I just don't feel like going to work today,' type of thing. This is the insidious loss of time we are fighting. Tardiness is often a mere case of carelessness. We are fighting that, too," he concluded.

'Press conference' meetings planned by Computer Sciences

The Nuclear Division's Computer Sciences Division will hold a series of "press conference" type meetings to acquaint interested persons with the services offered by the Division.

The meetings are scheduled as follows:

April 8, 1 p.m., ORGDP Cafeteria Auditorium, Building K-1002

April 9, 1 p.m., Y-12 Cafeteria Conference Room, Building 9711-5

April 9, 3 p.m., ORNL Central Auditorium, Building 4500N

Each meeting will consist of a brief summary of current activities and plans of the Division, followed by a question-and-answer period. All users or potential users of the Division's services are invited to attend and participate. If there are questions in advance of the meetings, they may be addressed to Harvey P. Carter, Building 4500N, ORNL, extension 3-1326.

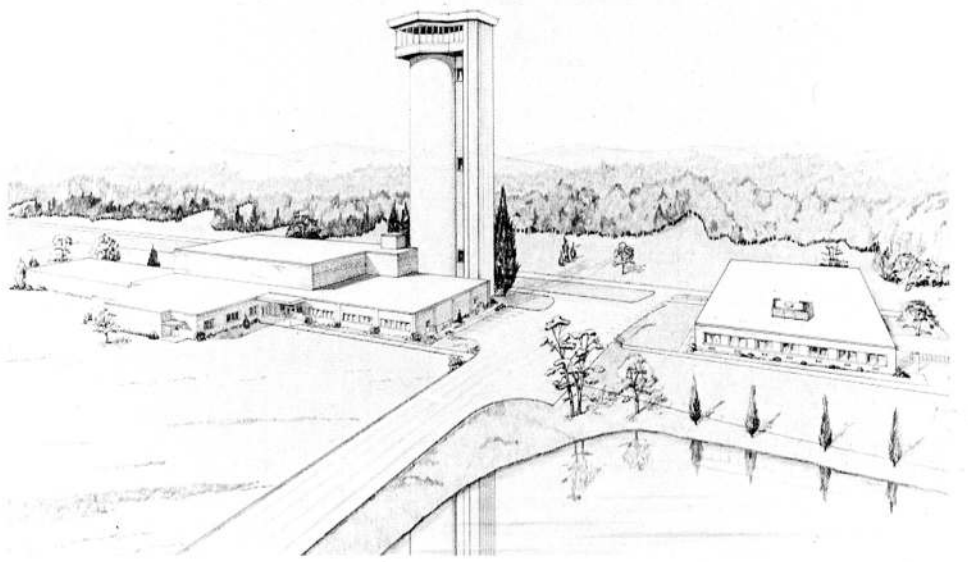
It is expected that these meetings will be held on a quarterly basis.

Men are born with two eyes and one tongue that they may see twice as much as they say.

WED RECENTLY — Elizabeth Anne McKenzie and Ernie Wayne Lawson were married recently at the Robertsville Baptist Church, Oak Ridge. The double ring ceremony was performed by the Rev. Fred Allen. The bride is the daughter of Malcolm R. McKenzie, and the bridegroom is the son of Ernest Lawson. Both fathers are employed in the Y-12 Plant.

PHY4-898

SPRING CLEANUP COMMITTEE — Oak Ridge Gaseous Diffusion Plant gears for Spring cleanup activities with the above captains and committee chairman. From left are Alec Alexander, Jerry Upchurch, Doug R. Carter, O. Lynn Calvert, John M. Kennerly, coordinator; Nate N. Landry, Herb E. Trammell, general chairman; David L. Stansberry, Jo Acres, Russ A. Cooper, Frank N. Bensey (sitting in for Perry Pryor), and Joe C. Hall.



"ATOM SMASHER" — The tall structure above is an architectural concept of what the Heavy Ion Accelerator Project may look like. This view was prepared by Robert S. Morris, Y-12, from a preliminary design by William A. Sloan, Y-12 Plant architect.

ORGDP and Paducah gear for spring cleanup work

Spring cleanup plans are underway at both of the gaseous diffusion plants.

PRIDE is the theme of the activities at the Oak Ridge Gaseous Diffusion Plant. P - for painting for appearance; R - for the Returning of unneeded documents; I - for Inspecting for hazards; D - for Discarding unused equipment; and E - for Encouraging safe practices.

With inspections for the entire plant set April 15-19, full implemention of publicity, pre-planning and coordinating efforts has been accomplished.

At ORGDP, Herb E. Trammell is acting as general chairman; and John M. Kennerly is serving as coordinator. Other captains and committee chairmen include: Alec Alexander, Jerry Upchurch, Doug R. Carter, O. Lynn Calvert, Nate N. Landry, David L. Stansberry, Jo Acres, Russ A. Cooper, Frank N. Bensey (subbing for Perry Pryor), and Joe C. Hall.

With almost the identical schedule, the Paducah plant has Bill Penry as general chairman. The cleanup committee consists of Ralph Vaughn, Nathaniel Addleman, William D. Brickeen, P. R. McGhee, Howitt C. Mathis Jr., Augustus Cook and Hugh Vantreese.

MAPPING CAMPAIGN — Bob Seyfried puts finishing touches on a Spring cleanup poster, as Herb Trammell, left, and John Kennerly look on. Plans for the campaign will run into May, with the theme word of PRIDE throughout the entire strategy.

Words and eggs must be handled with care;
For words once spoken,
And eggs once broken,
Are mighty hard to repair.

Biomedical studies

(Continued from page 2)

by the Carnegie Institute grants, began at ORNL Biology in 1971 with four students. This summer the School is expecting 24 students.

The School also will administer a recently-established master's degree program, aimed primarily at helping persons employed in ORNL Biology to work toward an M.S. degree while continuing their regular job. Billen expects about four students in this program the first year and anticipates that the program eventually may accommodate 20 persons.

Ball and Martin

(Continued from page 1)

These ions can be used to create radiation damage in materials at rates thousands of times greater than can neutrons from a nuclear reactor. Such studies may prove invaluable in optimizing structural materials for the construction of modern nuclear power reactors so important to our long range program of energy self-sufficiency.

The project, as included in the President's budget, would receive funds for the tandem accelerator, cyclotron modifications, the tower to house the accelerator, and some additional experimental and control room areas. The facility is scheduled for completion in four years.

Ball came to ORNL in 1958 after receiving his Ph.D. from the University of Washington, Seattle. He served for a year as acting director of the Cyclotron Laboratory and, for the past year, was the acting director of the Nuclear Data Project.

Ball is a native of Portland, Ore. He and Jackie, his wife, reside at 110 Berwick Drive, Oak Ridge. They have a daughter, Michaela, and a son, Jason.

Martin, who joined ORNL in 1948, was associate director of the Cyclotron Laboratory. An electrical engineering graduate of The University of Tennessee, he is currently president of the Nuclear and Plasma Sciences Society, a part of the Institute of Electrical and Electronics Engineers.

Martin and his wife, Laurie, live at 9623 Tunbridge Lane in Concord. His favorite pasttime is playing golf.

QUESTION BOX ? ?

(Continued from page 1)

with their business. We agreed that their argument was valid and discontinued the practice. Even though it would, as you say, be received well by our employees, we do not think, therefore, that we should provide safety sunglasses to employees for use outside the plant at or below our actual cost.

NUCLEAR DIVISION NEWS

UNION CARBIDE

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